

REMARKS

Favorable consideration and allowance of the present application is respectfully requested.

Claims 1-5, 10-29, and 32, including independent claims 1, 19, and 24, are currently pending in the present application. Independent claim 1, for instance, is directed to a method for treating a wound by removing a protease from the site of the wound. The method comprises selecting fibers that are capable of removing a protease, wherein the fibers consist essentially of protein fibers. A wound dressing is formed from the fibers. The wound dressing and a protein selected from the group consisting of growth factors, cytokines, and chemokines are applied to the wound site so that the fibers are in contact with the wound site. At least a portion of the protease found at the wound site is allowed to be attracted to and entrapped by the fibers. The wound dressing is removed from the wound site so that at least a portion of the protease is removed from the wound site.

In the Office Action, independent claims 1, 19, and 24 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,156,334 to Meyer-Ingold, et al. in view of WO 97/07273 to Ninagawa. Meyer-Ingold, et al. is directed to a wound covering for initiating or promoting healing of chronic wounds. Specifically, the wound covering is characterized in that substances which interact with interfering factors present in the wound exudates are covalently bonded to a carrier material. However, as agreed by the Examiner, Meyer-Ingold, et al. fails to disclose the carrier material (wound

dressings) consisting essentially of protein fibers, as set forth in independent claims 1, 19, and 24.

Nevertheless, Ninagawa was cited in conjunction with Meyer-Ingold, et al. in an attempt to render obvious independent claims 1, 19, and 24. Specifically, the motivation for such a combination was said to stem directly from the disclosure of Meyer-Ingold, et al., which teaches that “wound dressings . . . known in the prior art can be modified (col. 5, line 1- col. 10, line 4).” However, this rationale is based on the “obvious to try” standard, which is improper under 35 U.S.C. §103(a). For instance, although cursorily mentioning other types of wound coverings, the preferred carrier materials of Meyer-Ingold, et al. are said to include cellulose, alginates and other polysaccharides, and synthetic polymers. (Col. 8, ll. 27-44). In fact, many of the embodiments of Meyer-Ingold, et al. do not even employ “fibers” to form the wound dressing. For example, gels and films are also utilized. (See e.g., Col. 8, ll. 42-44 and Examples 3-5). Thus, Applicants respectfully submit that no specific motivation would have existed to employ a carrier material consisting essentially of protein fibers.

The lack of any such motivation is further bolstered by the fact that neither of the cited references recognizes the benefits obtained by the claimed invention. That is, it is believed that proteases are able to tunnel into the interior of the claimed wound dressing because the protein fibers, or specific regions thereof, are substrates for the targeted protease. Hence, the protease may cut into the fiber, thereby moving away from the surface and effectively becoming removed from the equilibrium process at the fiber surface. In this manner, such deleterious proteases may be permanently and

disproportionately removed from the wound site. Accordingly, for at least the reasons set forth above, Applicants respectfully submit that independent claims 1, 19, and 24 patentably define over the above-cited references.

In the Office Action, independent claims 1 and 24 were also rejected under 35 U.S.C. § 103(a) as being obvious over Meyer-Ingold, et al. in view of U.S. Patent No. 5,447,505 to Valentine, et al. The Office Action indicates that Valentine, et al. discloses the use of wool, for instance, to treat wounds. However, Valentine, et al. fails to cure any of the defects discussed above. For at least this reason, Applicants respectfully submit that independent claims 1 and 24 patentably define over the above-cited references, taken singularly or in any proper combination.

Independent claims 1 and 19 were also rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent Publication 2002/064551 to Edwards, et al. in view of Ninagawa and U.S. Patent No. 5,158,555 to Porzilli. As noted in Applicants' prior response, the declaration of Jason P. McDevitt was previously submitted to establish conception of the claimed invention prior to the earliest claimed priority date of Edwards, et al. (February 29, 2000).¹ The Office Action indicated that no such declaration was contained in the file. Thus, for the Examiner's convenience, Applicants are re-submitting herewith the declaration of Jason P. McDevitt, which establishes that Edwards, et al. is not available as prior art to the present application for use in the proposed § 103 rejection.

¹ Applicants' submission of this declaration is in no way an admission that Edwards, et al. either anticipates the claims of the present application under any applicable section of 35 U.S.C. § 102 or renders obvious, alone or in combination with other reference(s), the claims of the present application under 35 U.S.C. § 103.


Applicants also respectfully submit that, at least for the reasons indicated above relating to the corresponding independent claims 1, 19, and 24, dependent claims 2-5, 10-18, 20-23, 25-29, and 32 patentably define over the references cited. However, Applicants also note that the patentability of such dependent claims does not necessarily hinge on the patentability of the respective independent claims. In particular, some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

Thus, for at least the reasons set forth above, it is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Lewis is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

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